

***Proposed Revision to Wisconsin's State Implementation Plan
For Achieving the National 1-Hour Ozone Ambient Air Quality Standard***

Request to Redesignate to Attainment Status

Eight Wisconsin Nonattainment Counties comprising Three Areas
Designated Nonattainment for Ozone

and

Proposed Maintenance Plans for Ten Counties in Wisconsin
comprising Five Ozone Areas within the Lake Michigan Ozone
Region

Wisconsin DNR

Bureau of Air Management

May, 2002

Public Hearing Document

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Executive Summary – Wisconsin Ozone Redesignation Proposal

The entire Lake Michigan Region, including all counties in southern and eastern Wisconsin, is monitoring attainment of the 1-hour ozone national ambient air quality standard. This occurred at the close of the 2001 summer ozone season. As a consequence, Wisconsin (along with Illinois and Indiana) is pursuing a request to the U.S. Environmental Protection Agency (EPA) to formally redesignate the nonattainment areas in the Lake Michigan Region to attainment for the 1-hour ozone standard.

Meeting the 1-hour ozone standard in 2001 is a significant milestone for regional air quality improvement and for regional public health. This request comes well in advance of 2007, the year the region was previously modeled to achieve attainment. Once approved by EPA, the Lake Michigan Region will have the first severe ozone nonattainment areas in the country to have a full attainment demonstration and be redesignated as attainment – a major national air quality accomplishment.

Attainment of the ozone standard comes as a result of twenty years of effort by all sectors to reduce emissions of pollutants (e.g. volatile organic compounds (VOC) and nitrogen oxides (NOx) that cause ozone standard violations. Attainment is indicated when the number and intensity of peak ozone concentration periods has dropped sufficiently to meet the levels prescribed by the standard. Redesignation can be approved by EPA once data demonstrating attainment of the standard is certified and the state can show that it has adopted and implemented all required emission control programs developed as part of its approved attainment demonstration plan for 2007. To ensure the 1-hour ozone standard continues to be attained in the region, Wisconsin has worked with Illinois and Indiana to establish a 10-year maintenance plan. The plan includes formal regional technical evaluation triggers linked to elevated ozone readings and identifies mechanisms and commitments to adopt contingent control measures should the need be demonstrated.

The redesignation request to EPA applies to eight counties (Kenosha, Racine, Milwaukee, Ozaukee, Washington, Waukesha, Manitowoc and Door counties) in eastern Wisconsin. The proposal contains the technical justification for the redesignation and also includes a regional maintenance plan that applies to these counties. The proposal also updates the existing maintenance plans for two former nonattainment areas (Sheboygan and Kewaunee counties).

Upon EPA approval, the new source permitting requirements for major VOC emission sources will change to reflect attainment status control technology targets and to eliminate the VOC offset requirement in southeastern Wisconsin. The changes will result in a consistent statewide application of VOC source size thresholds and emission control requirements.

All other existing and scheduled emission control programs directed at ozone control for the areas remain federally-enforceable parts of the state implementation plan (SIP). This will ensure that the air quality, and related public health improvements already realized will not be lost. The major elements of Wisconsin's Ozone SIP include the vehicle inspection and maintenance (I/M) program, reasonably available control technology (RACT) requirements for existing VOC sources and the more recent NOx emissions limitations for the large stationary sources remain in effect for the duration of the Maintenance Plan (2012 with a commitment to update through 2022). In addition, the

major federal emission control programs such as reformulated gasoline, new vehicle emission standards, new off-road engine emission standards and various national and regional control technology requirements for stationary sources remain fully active and critical components of the change to attainment status.

Finally, the maintenance plan will establish revised transportation conformity budgets for NO_x and VOC, for the five areas comprising the 10 eastern Wisconsin counties affected by the regional plan. The plan sets new numbers for 2012, updates the 2007 budgets and deletes the interim progress-based 2002 and 2005 budgets.

The Department has worked with stakeholders during the redesignation proposal development period to address formal planning requirements, concerns regarding the process and the formal commitment to a contingent regional response for renewed 1-hour ozone air quality violation and to clarify the comprehensive air quality status of the area. While this 1-hour standard redesignation will be a critical milestone, the areas addressed all continue to show elevated 8-hour ozone concentrations that will likely result in future designation for some or all of the areas to nonattainment for the 8-hour ozone standard. Therefore, EPA approval of this redesignation request should be viewed as a major, but not fully sufficient, step in reducing the deleterious impacts of ozone on public health.

Redesignation and Maintenance Plan Proposal May 2002

Executive Summary

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Public Hearing Notice

1. Introduction

Since the late 1970s Wisconsin has been preparing and implementing various emission control plans to improve air quality in 10 southern and eastern counties which have experienced violations of the national ambient air quality standards (NAAQS) for ozone – a photochemical oxidant shown to impact public health. The adoption of a more regional, multi-state approach to ozone evaluation and control efforts has resulted in the gradual improvement of the areas' air quality. This improvement accelerated after the latest formal designations of nonattainment status built into the Clean Air Act amendments of 1990 (CAA-90). Last year, in tandem with Illinois and Indiana, Wisconsin received full approval for a modeled regional demonstration and related emission control plan focused on achieving the ozone standard by 2007.

This document provides the technical justification for US-Environmental Protection Agency (US-EPA) to redesignate the current 8 nonattainment counties of southern and eastern Wisconsin as attainment for the 1-hour ozone standard based on achieving monitored regional attainment during the years 1999, 2000 and 2001. The three formal nonattainment area(s) subject to redesignation include the 6 county Milwaukee “Severe” area (Kenosha, Milwaukee, Ozaukee, Racine, Washington and Waukesha counties), the Manitowoc County “Moderate” area and the Door County “Rural transport – Marginal” area.

The document also revises the standing attainment maintenance plans for two other former nonattainment areas along the Lake Michigan shoreline – Sheboygan and Kewaunee counties. This plan takes no action regarding the Walworth County maintenance area.

Upon US-EPA approval of this request and its related State Implementation Plan (SIP) revisions for ozone air quality control, Wisconsin can formally change the new source review permitting and emissions offset requirements for VOC-emitting facilities in Wisconsin. The changes will result in more consistent application of source size thresholds and emission control requirements for new facilities emitting volatile organic compounds (VOC) and nitrogen oxides (NO_x) across the state.

Redesignation requests are also being filed on a parallel track for the combined northeastern Illinois (IL) and northwestern Indiana (IN) portions of the Chicago Consolidated Metropolitan Statistical Area (CMSA) of the Lake Michigan region. Once this full set of redesignation requests and maintenance plans are approved, the entire Lake Michigan region will be designated attainment for the 1-hour ozone standard. This will be the first group of *severe* ozone areas in the country to adopt full attainment demonstrations *and* be redesignated as attainment – a major regional and national air quality milestone.

With the new source permitting exception noted above, the changed air quality status will not alter the existing air emissions control program requirements contained in the state's Ozone SIP. Major state program elements such as the vehicle inspection and maintenance program, reasonably available control technology (RACT) requirements for existing VOC sources and the more recent NO_x emissions limitations for certain stationary sources will all remain in effect for the duration of the current Maintenance Plan (2012). These are the local components of emission control programs that have

resulted in the improved ambient air quality for southeastern Wisconsin since the areas' designation as nonattainment – most recently as part of the 1990 Clean Air Act amendments. In addition, the major federal emission control programs such as reformulated gasoline, new vehicle emission standards, new off-road engine emission standards and various national and regional control technology requirements for stationary sources including the NOx SIP and related Section 126 NOx control programs remain fully active for the Lake Michigan Ozone Region.

Finally, this submittal in no way addresses expected control programs for this Region associated with the new eight hour ozone standard or the new PM-2.5 standards. The relaxation of new source control technology requirements (for VOC sources) and the elimination of the current VOC emissions offset requirements might be reversed once areas are formally designated under the eight hour standards. This is expected to occur between 2004 and 2005. In addition, certain emission control requirements for as yet uncontrolled large sources of NOx and SO2 could be required under regional haze control programs being developed by US-EPA to meet visibility requirements of the Act, and, to further address the regional pollutant transport aspect of ozone and PM-2.5 plans for areas downwind of the Lake Michigan region.